

***What is claimed is:***

1        1.        A portable traffic control device, comprising:

2                a housing comprising a length extending from a first end to a second end, a width  
3                extending from a first side to a second side, a height extending from a bottom to a top,  
4                and a plurality of openings on said top of said housing;

5                a first shaft rotatably connected to said housing and extending from about said  
6                first end to about said second end;

7                a second shaft rotatably connected to said housing and extending generally  
8                parallel to said first shaft from about said first end to about said second end;

9                a first plurality of blades connected to said first shaft, wherein each blade of said  
10               first plurality of blades has a first position extending generally upward through an  
11               opening of said plurality of openings in said housing and a second position extending  
12               generally horizontally within said housing;

13               a second plurality of blades connected to said second shaft, wherein each blade  
14               of said second plurality of blades has a primary position extending generally upward  
15               through an opening of said plurality of openings in said housing and a secondary position  
16               extending generally horizontally within said housing; and

17               biasing means for urging each blade of said first plurality of blades to rotate  
18               toward said first position and each blade of said second plurality of blades to rotate  
19               toward said primary position.

1        2.        The portable traffic control device of claim 1, wherein said housing further comprises:

2                a base extending from said first end to said second end and extending from said  
3                first side to said second side, said base comprising a generally flat rectangular foundation,  
4                side pieces extending upward from said foundation along said first side and said second  
5                side, and end pieces extending upward from said foundation along said first end and said  
6                second end; and

7                a cover defining said top of said housing, wherein said cover attaches to said base,  
8                and wherein said plurality of openings penetrate said cover.

- 1        3.        The portable traffic control device of claim 2, wherein said cover attaches to said side  
2                pieces of said base.
- 1        4.        The portable traffic control device of claim 2, wherein said housing further comprises:  
2                a plurality of reinforcing channels attached to said foundation, wherein each  
3                reinforcing channel has guiding recesses that receive said first shaft and said second  
4                shaft; and  
5                a plurality of bushing clamps attached to said reinforcing channels, wherein each  
6                bushing clamp has recesses aligned with said guiding recesses, and wherein said guiding  
7                recesses and said recesses form channels through which said first shaft and said second  
8                shaft extend.
- 1        5.        The portable traffic control device of claim 1, wherein in said first position each blade  
2                of said first plurality of blades extends generally upward from said first shaft toward said  
3                first side at an angle of about fifty degrees from said bottom of said housing, and wherein  
4                in said primary position each blade of said second plurality of blades extends generally  
5                upward from said second shaft toward said second side at an angle of about fifty degrees  
6                from said bottom of said housing.
- 1        6.        The portable traffic control device of claim 1, further comprising a rotating means for  
2                rotating said first shaft such that each blade of said first plurality of blades moves  
3                between said first position and said second position, and for independently rotating said  
4                second shaft such that each blade of said second plurality of blades moves between said  
5                primary position and said secondary position.
- 1        7.        The portable traffic control device of claim 6, wherein said rotating means is a rotary  
2                manual control box comprising:  
3                a control box housing;  
4                a first control shaft rotatably connected to said control box housing, wherein said  
5                first control shaft is connected to said first shaft such that rotation of said first control  
6                shaft results in a corresponding rotation of said first shaft;

7           a second control shaft rotatably connected to said control box housing, wherein  
8           said second control shaft is connected to said second shaft such that rotation of said  
9           second control shaft results in a corresponding rotation of said second shaft;

10           a first lever arm connected to said first control shaft; and

11           a second lever arm connected to said second control shaft.

1       8.     The portable traffic control device of claim 7, wherein said first control shaft is  
2           detachably connected to said first shaft, and wherein said second control shaft is  
3           detachably connected to said second shaft.

1       9.     The portable traffic control device of claim 1, wherein said housing, said first shaft, and  
2           said second shaft are detachably connectable to an other portable traffic control device  
3           of claim 1.

1       10.    The portable traffic control device of claim 9, wherein said first end of said housing is  
2           screwed to said second end of said housing of said other portable traffic control device,  
3           and wherein said first shaft is connected to said first shaft of said other portable traffic  
4           control device using a coupler and a screw locktite, and wherein said second shaft is  
5           connected to said second shaft of said other portable traffic control device using a coupler  
6           and a lock-tight screw.

1       11.    An apparatus for regulating traffic flow in either direction, comprising a portable and  
2           modular traffic control device with two opposing rows of retractable blades, each row  
3           being retractable independently of the other row, and each row facing in generally  
4           opposite directions.

1       12.    A method for using a portable traffic control device, the method comprising the steps of:  
2           (a)    placing a portable traffic control device across a surface traversed by wheeled  
3           vehicles, wherein said portable traffic control device comprises:  
4                    a housing comprising a length extending from a first end to a second end,  
5                    a width extending from a first side to a second side, a height extending from a  
6                    bottom to a top, and a plurality of openings on said top of said housing;

7 a first shaft rotatably connected to said housing and extending from about  
8 said first end to about said second end;

9 a second shaft rotatably connected to said housing and extending  
10 generally parallel to said first shaft from about said first end to about said second  
11 end;

12 a first plurality of blades connected to said first shaft, wherein each blade  
13 of said first plurality of blades has a first position extending generally upward  
14 through an opening of said plurality of openings in said housing and a second  
15 position extending generally horizontally within said housing;

16 a second plurality of blades connected to said second shaft, wherein each  
17 blade of said second plurality of blades has a primary position extending  
18 generally upward through an opening of said plurality of openings in said housing  
19 and a secondary position extending generally horizontally within said housing;  
20 and

21 biasing means for urging each blade of said first plurality of blades to  
22 rotate toward said first position and each blade of said second plurality of blades  
23 to rotate toward said primary position; and

24 (b) rotating said first shaft and said second shaft to position as desired each blade of  
25 said first plurality of blades and each blade of said second plurality of blades.